

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-026256**Date Inspected:** 08-Sep-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Jobsite**CWI Name:** As noted below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** SAS OBG**Summary of Items Observed:**

Quality Assurance Inspector (QA) Douglas Frey was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

1. 11E PP100 E3 Lifting Lug Hole #4 (Exterior)
2. 11W PP103 W3 Lifting Lug Hole #2 and 4 (Interior)
3. 11E 12E Bottom Plate D R1 (Exterior)
4. 11W 12W Bottom Plate D (Exterior)
5. 9E PP76 E4 Lifting Lug Holes (Exterior)
6. 9W PP77 W4 Lifting Lug Holes #2 and 4 (Interior)
7. 10W PP88 W3 Lifting Lug Holes #1 and 3 (Interior)

1. 11E PP100 E3 Lifting Lug Hole #4 (Exterior)

The QA inspector observed ABF welder Fred Kaddu ID# 2188 performing Shielded Metal Arc Welding (SMAW) in the 1G flat position on Lifting Lug Hole (LLH) #4 located at 11E PP100 E3. The QA inspector verified the fit up of the joint and found it to be satisfactory. The QA inspector observed the QC inspector identified as Fred Von Hoff monitoring the welding to ensure the welding parameters were in compliance pertaining to ABF-WPS-D15-1050A-CU. The parameters were recorded as (Amperes=135). The QA inspector made subsequent observations throughout the shift to monitor quality and the QA inspector noted that the work appeared to be in general conformance with the contract documents.

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2. 11W PP103 W3 Lifting Lug Hole #2 and 4 (Interior)

The QA inspector observed ABF welder Jorge Lopez ID# 6149 performing Shielded Metal Arc Welding (SMAW) in the 4G overhead position on Lifting Lug Holes (LLH) #2 and 4 located at 11EWPP103 W3. The QA inspector observed the QC inspector identified as Fred Von Hoff monitoring the welding to ensure the welding parameters were in compliance pertaining to ABF-WPS-D15-1110A Revision 1. The parameters were recorded as (Amperes=133). The QA inspector made subsequent observations throughout the shift to monitor quality and the QA inspector noted that the work appeared to be in general conformance with the contract documents.

3. 11E 12E Bottom Plate D R1 (Exterior)

The QA Inspector noted the dimensions of the indications on D2 at y+2700 as 75mm's in length, and 10mm's depth, y+1370 as 80mm's in length and 10mm's in depth. The QA Inspector observed the QC Inspector identified as Pat Swain perform Magnetic Particle inspection on the sites and found them to be acceptable. The QA Inspector observed ABF welder Wai Kit Lai ID#2953 perform Shielded Metal Arc Welding (SMAW) in the 4G overhead position with the QC Inspector being present in order to monitor the welding and ensure the welding parameters were in compliance pertaining to ABF-WPS-D15-1001-R. The QA Inspector noted that the work was completed on this date and appeared to be in general conformance with the contract documents.

4. 11W 12W Bottom Plate D (Exterior)

The QA inspector randomly observed ABF welding operator James Zhen ID#6001 performing Flux Core Arc Welding with gas (FCAW-G) utilizing a "Bug-O" motorized rail system with a magnetic base attached in the 4G overhead position on the underside of bottom plate D, at 11W 12W of the OBG. The QA inspector observed the QC inspector identified as Steve Jensen monitoring the welding to ensure the welding parameters were in compliance pertaining to ABF-WPS-D15-3042A-4. The parameters were recorded as (A=236/V=24.9/TS=175/HI=2.01). The QA inspector made subsequent observations throughout the shift to monitor quality and noted that the work is in progress and appears to be in general conformance to the contract requirements.

5. 9E PP76 E4 Lifting Lug Holes (Exterior)

The QA Inspector performed a Magnetic Particle Test (MT) on Lifting Lug Holes #1-4 at 9E PP76 E4, 10E PP92 E3 and 11E PP104 E4. The QA Inspector tested 10% of the weld to verify the weld and testing by QC meet the requirements of the contract documents. The QA Inspector utilized the MT Procedure identified as SE-MT-D1.5-CT-100 Rev.4 during the examination. The QA Inspector noted that the work appeared to be free of defects and was found to be acceptable and in general conformance with the contract documents. Upon completion of the MT, the QA Inspector performed Ultrasonic Testing utilizing a G.E./Krautkramer USN 60. The QA Inspector also utilized the UT Procedure identified as SE-UT-D1.5-CT-100 Rev.4 during the examination. Upon completion of the testing, it was noted by the QA Inspector that no indications were present and the work was found to be acceptable.

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6. 9W PP77 W4 Lifting Lug Holes #2 and 4 (Interior)

The QA inspector observed ABF welder Mike Jimenez ID# 4671 performing Shielded Metal Arc Welding (SMAW) in the 4G overhead position on Lifting Lug Hole (LLH) #2 and 4 located at 9W PP77 W4. The QA inspector observed the QC inspector identified as Fred Von Hoff monitoring the welding to ensure the welding parameters were in compliance pertaining to ABF-WPS-D15-1110A Revision 1. The parameters were recorded as (Amperes=135). The QA inspector made subsequent observations throughout the shift to monitor quality and the QA inspector noted that the work appeared to be in general conformance with the contract documents.

7. 10W PP88 W3 Lifting Lug Holes #1 and 3 (Interior)

The QA inspector observed ABF welder Salvador Sandoval ID# 2202 performing Shielded Metal Arc Welding (SMAW) in the 4G overhead position on Lifting Lug Hole (LLH) #1 and 3 located at 10W PP88 W3. The QA inspector observed the QC inspector identified as Fred Von Hoff monitoring the welding to ensure the welding parameters were in compliance pertaining to ABF-WPS-D15-1110A Revision 1. The parameters were recorded as (Amperes=132). The QA inspector made subsequent observations throughout the shift to monitor quality and the QA inspector noted that the work appeared to be in general conformance with the contract documents.

Summary of Conversations:

At the beginning the shift the QA inspector met with QC inspector William Sherwood and discussed the welders assignments and locations for the shift to include pending issues, ongoing work and required testing.



Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Frey,Doug	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer
